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REMARKS

In the Office Action dated March 6, 2003, claims 1-45 are pending in the application. Claims 18-35 stand withdrawn. Claims 1-17 and 36-45 stand rejected for bases further explained below. The action has been made final. Under the present Amendment, claims 1, 3, 9, 10, 12, 13, 16, 17, 37 and 40 are amended. Claims 18-35 are cancelled due to the final restriction requirement. Under the present § 1.116 Amendment, claims 2 and 41-45 are cancelled.

Applicant submits the requirements of 37 C.F.R. § 1.116 are met by the present Amendment. No new matter has been added requiring additional consideration and/or search, no new claims have been added, several claims have been cancelled, and the present amendments are made pursuant to the additional grounds of rejection and/or additional bases provided by the Examiner on prior rejections as well as topics discussed during the April 3, 2003 interview with the Examiner. It is respectfully submitted this Amendment overcomes all of the Examiner's rejections of the pending claims. Applicant requests entrance of the amendments and allowance of all remaining claims.

Pursuant to M.P.E.P. § 713.04, Applicant appreciates the courtesies extended by the Examiner during the April 3, 2003 personal interview. Possible amendments to claim 1, as substantially set forth in the amendments to claim 1 presently made herein and basis for allowability thereon, were discussed in view of the '470 Fawell reference and an agreement was not reached. The Applicant's presented several photographs of commercialized versions of the present invention during the interview.

Applicant further provides herein a 37 C.F.R. § 1.132 Declaration from inventor William A. Cox in support of patentability. Applicant respectfully asserts that

the Declaration further complies with 37 C.F.R. § 1.116 as the Declaration addresses one or more of the additional bases for rejection set forth in the March 6, 2003 final action, the additional bases provided by the Examiner on prior rejections and topics discussed during the April 3, 2003 interview. Application of the § 1.132 Declaration is discussed below. Applicant requests entrance of the Declaration.

Claims 1-8, 10, 11, 13-15, 17, 36, 40, 41 and 43 are rejected under 35 U.S.C. § 102(b) as being anticipated by Fawell et al. The Examiner contends Fawell shows a base, cross support or cover, modular die support (29), second removable modular die support (27), a pair of rotary dies having lateral rims, a pressure member (2), the modular die supports having cylindrical roller bearings (in the form of cylindrical bushings), and spacers (the bottom portion of element 27).

Claim 1 has been amended to further clarify: (1) the features of the cross member being positioned transverse to the second axis of rotation and (2) movement of the cross member with respect to the columns (as suggested by the Examiner) and (3) the spaced relation of the modular die supports to the columns. On (1) and (2) Fawell does not teach or suggest use of a cross member (asserted by the Examiner to be 2, 2, 6) that is positioned transverse to the axis of rotation of the rotating die. The asserted Fawell cross member is positioned parallel to the axis of rotation as is the cross member (188) of Stollenwerk. The Examiner has further indicated that only portions of the asserted Fawell cross member move. On (3), Fawell and Stollenwerk do not teach die supports that are spaced from the asserted columns as disclosed and claimed by the Applicant. As previously explained, the references disclose use of heavy, machined side plates that receive cylindrical bushings (Fawell) and cylindrical roller bearings (Stollenwerk) in

precision machined slots in the side plates to support and restrain the bearings, and thus the dies, from lateral and linear axial movement. See Declaration of William A. Cox ¶¶ 3,8. Applicants' claimed invention separates the die supports from the columns which eliminates machining of the columns described as disadvantages of the prior art and references asserted against. As explained in Applicant's Background of the Invention, the elimination of heavy, complex machined side plates provides substantial advantages in design, manufacturing, assembly and cost. Cox Decl. ¶¶ 3-6. Under the present amendments, Fawell does not anticipate or render obvious in any permissible combination claim 1.

Claim 2 has been cancelled. Claims 3-8 are not anticipated or rendered obvious as being dependent on an allowable base claim.

Claim 10 has been amended to further clarify an embodiment in use of cylindrical roller bearings. Under the limitations of claim 1, wherein the die supports are spaced from the columns, claim 9 is not anticipated or rendered obvious in any permissible combination by the references of record.

Independent claim 13 has been amended to clarify: (1) the number, (2) position of and (3) movement of the cross members, (4) the number and uniform nature of the columns between the cover and the base, and (5) the first modular die support mounted to the base having separate bearings and individual rollers supporting and engaging the first rotary die. As explained above, Fawell and Stollenwerk do not teach or suggest the claimed cross member either in number, position or movement. On the uniform columns, in rejection of claim 37 addressed below, the Examiner asserts that only the area of the columns where the crossbar moves is relevant, the other areas

representing a simple design choice. This position remains traversed as the Examiner's bases and conclusion are respectfully viewed as incorrect and unsupported. Although it is true that, for Fawell the columns must generally be of uniform section in the area of the asserted cross member movement, this does not render the remaining portions of the columns irrelevant or a simple design choice. To the contrary, Applicant has invented a design permitting separation of the columns from the die supports which enables use of uniform, off-the-shelf column or rod stock to be used as the elongate columns which greatly benefit simplicity of the die module as well as the ease of manufacturer and low cost through minimization, or elimination of, the need to machine the side plate structure shown in the cited references. Cox Decl. ¶¶ 3-6. Fawell and Stollenwerk further do not show use of the individual bearings and peripheral rollers for the first die support as explained above. No art has been cited by the Examiner which teaches or suggests these claimed features singularly or in combination. Fawell does not anticipate or render obvious in any permissible combination claim 13.

Claims 14, 15, 17 and 36 are not anticipated or rendered obvious as being dependant on an allowable base claim.

Claim 40 has been amended to further clarify the features of: (1) the number and uniform section of the rods, (2) the pair of opposing cross members (3) positioned transverse to the axis of rotation, (4) the first and second modular die supports each having a pair of bearings, each bearing including at least two rollers. Each of these amendments has been explained above and is not taught or suggested by Fawell or the references of record individually or in any permissible combination.

Claims 37 and 42 are rejected under 35 U.S.C. § 103(a) as being

unpatentable over Fawell et al. As discussed above, Applicant traverses the rejection on the uniform column limitation for the basis stated above and supported by the Cox Declaration ¶¶ 5-6. Fawell simply does not teach or suggest use of uniform elongate columns as claimed. As viewed in Figs. 2, 3 and 7, Fawell's side plates are by no means uniform in cross section between the asserted base and cover. Claims 37 and 42 are not rendered obvious by Fawell alone or in any permissible combination with the references of record.

Claims 1-11, 13-17, 36, 40, 41 and 43-45 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fawell et al. in view of Stollenwerk.

Applicant respectfully maintains its position that there is no teaching, incentive, suggestion or motivation to combine the individual rollers 50, 52 of Stollenwerk to the frame structure and die support system of Fawell. As explained in the prior action and above, both Fawell and Stollenwerk use cylindrical bushings or bearings to support and restrain the dies from lateral and linear axial movement through the die journals. As explained above and supported by the Cox Declaration, Stollenwerk's use of peripheral rollers is not for the purpose of vertically supporting or restraining lateral or linear axial movement of the dies, but rather, simply used as part of a pressure mechanism to apply vertical force to the dies to prevent separation there between. Cox Decl. ¶¶ 8-10. Further, Applicant asserts that it is by no means a simple substitution to replace Fawell's die support cylindrical bushings (or cylindrical roller bearings) with Stollenwerk's pressure rollers 50, 52 and would not have been obvious to one skilled in the art to do so. Cox Decl. ¶¶ 8-10. The time and resources expended in developing the invention and the sales and interest of Applicant's commercial embodiments supports

that the invention is non-obvious. Cox Decl. ¶¶ 14-19.

Claim 1 has been amended to further clarify the spaced relation between the die supports and columns. As explained above, these features are not taught or suggested by Fawell or Stollenwerk.

Claim 2 has been cancelled. Claims 3-8 are not obvious as being dependent on an allowable base claim.

Claim 9 has been amended to further clarify an embodiment that the first and second die supports each include a first and a second bearing, each bearing having at least two rollers parallel to and angularly spaced from one another. Fawell does not teach or suggest use of the claimed bearings and angularly positioned rollers. Fawell's teachings are limited to cylindrical roller bushings positioned in precision machined side plates known in 1900. As previously contended by Applicant, there is no teaching, suggestion, or motivation to take the pressure member rollers (50, 52) of Stollenwerk to replace the cylindrical bushings which support and restrain the die rolls. Cox Decl. ¶¶ 8-9. Fawell does not anticipate or render obvious in any permissible combination claim 9.

Claim 10 has been amended to include features not taught or suggested by Fawell or Stollenwerk as explained above. Claim 2 has been cancelled. Claims 3-8 and 11 are not rendered obvious as being dependant on an allowable base claim.

Claims 13 and 40 have been amended to further clarify features of the present invention including the first modular die support mounted to the base including bearings and individual rollers. Stollenwerk does not teach or suggest use of the asserted independent or peripheral rollers 50, 52 being mounted to a base and vertically supporting the rotary dies as claimed.

Claims 14-17 and 36 are not obvious as being dependant on an allowable base claim. Claims 41-45 have been cancelled.

Claims 12, 37, 38, 39 and 42 rejected under 35 U.S.C. § 103(a) as being unpatentable over Fawell et al. in view of Stollenwerk in further view of Okuda. The Examiner asserts that it is well-known in the art to employ cylindrical posts as shown in Okuda for vertical adjustability of rotary dies.

Applicant asserts that Okuda teaches a device for releasing and connecting drive spindles (1a, 1b) to die rolls (8a, 8b). Cox Decl. ¶¶ 11, 12. The device has a moving structural frame (17). The subject circular posts (13) are positioned within the frame and simply serve as guides within the movable frame structure (17) to vertically guide the drive spindles (1a, 1b) to accommodate the distance between journals of the die rolls.

Applicant respectfully traverses the rejection on two principal grounds. First, there is no teaching, suggestion, motivation or incentive to combine Okuda with Fawell and Stollenwerk. Okuda's coupling device for connecting drive spindles between a pinion stand and die rolls is not a modular rotary die frame or structure, but is merely an attachment to the rolls as part of the rotary drive mechanism. Second, Okuda's use of vertical posts are simply vertical guides for the spindles. Applicant's use of columns or rods provides and serves as a structure and frame for the rotary die module itself. Cox Decl. ¶¶ 11-13. Applicant's columns or rods are not used for vertical adjustment of the die rolls as asserted by the Examiner. The vertical position of the dies is dictated by the die supports and diameter of the dies themselves. In an alternate embodiment, the cylindrical roller bearing blocks and spacers determine the vertical

position of the rotary dies.

It is respectfully asserted that the Examiner's showing in the broad die cutting art of the use of uniform cylindrical posts as vertical guides does not meet the burden of showing incentive, motivation and suggestion to combine such teachings to the cited references. As explained above, the Examiner has not cited any prior art showing the use of elongate, uniform columns in a rotary die frame structure or the spaced relationship of the elongate columns to the die supports as claimed. Applicant is not aware of any such prior art. Cox Decl. ¶¶ 3-13. Time and effort in development, and the sales and interest in the commercial embodiments of the invention further supports the invention is non-obvious. Cox Decl. ¶¶ 14-19. Therefore, the rejected claims are not rendered obvious under the cited references of record.


It is respectfully submitted that the Amendment overcomes all of the Examiner's rejections of the pending claims. It is further submitted that this Amendment is suitable for entry after a Final Action under 37 C.F.R. § 1.116. No new issues have been added which would warrant further consideration and/or search nor has any new matter been added. The above amendments are in response to the Examiner's additional bases for rejection, additional bases provided on prior rejections, the April 3 interview and the new citation of Okuda. The accompanying Cox Declaration is further submitted to address the noted bases for rejection. For these reasons, the present amendments could not have been made in response to the Examiner's prior action. No new claims have been added and 6 claims have been cancelled to further narrow the issues and focus on the pending claims. Thus, entry of this Amendment is warranted.

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It is respectfully submitted that this Amendment places all pending claims 1, 3-17 and 36-40 in a condition for allowance, notice of which is respectfully requested.

Respectfully submitted,

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